

**ABSTRACT**

The invention relates to a heat exchanger for motor vehicles, having a large number of flat tubes through which a liquid cooling medium can flow, and having corrugated fins which are associated with these flat  
5 tubes and to which environmental air or other media can be applied. The flat tubes having indentations pointing inward on at least one of their flat faces. Heat transfer between the core flow of the cooling medium and the flat tube walls is improved, and the power density of the heat exchanger is thus increased. The indentations are in the form of  
10 elongated vortex generators having a longitudinal axis, and the ratio between the height (H) of the vortex generators and the height (h) of the flat tubes is preferably approximately 0.05 to 0.5, the longitudinal axes of the vortex generators are preferably inclined at angles of approximately  
15 10° to 40° to the direction of the tube longitudinal axis, and vortex generators which are adjacent to one another transversely with respect to the tube longitudinal axis are inclined in opposite senses.